



METROPOLITAN
TRANSPORTATION
COMMISSION

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Memorandum

TO: Operations Committee

DATE: October 1, 2010

FR: Steve Heminger, Executive Director

W.I.: 2654

RE: Contract - UPP IntelliDriveSM Phase 2 Consultant – Mixon/Hill, Inc.

Staff requests this Committee's authorization to negotiate and enter into a contract with Mixon/Hill, Inc. in an amount not to exceed \$1,002,500 to design/build/operate a testbed in order to analyze and test the feasibility and potential value of using IntelliDriveSM technologies to support High-Occupancy/Toll (HOT) and express lane operations. This is Phase 2 of the Urban Partnership Program IntelliDriveSM project. IntelliDriveSM is formerly known as Vehicle Infrastructure Integration or VII.

UPP IntelliDriveSM Project Background

In March 2009, MTC received a grant through the Urban Partnership Program (UPP), sponsored by the US DOT, for several projects. The grant required 20% matching local funds. A total of \$1,052,500 was allocated for a pilot program to demonstrate the capabilities of IntelliDriveSM technology to improve HOT lane operations.

Delivery of the IntelliDriveSM HOT lane project was divided into two phases: 1) research to identify specific aspects of HOT lane operation that could benefit from IntelliDriveSM technologies and would be feasible for field testing, and 2) field testing of use cases identified in Phase 1. MTC selected Mixon/Hill, Inc for Phase 1, and a white paper was published on October 9, 2009. The paper recommended specific components of an IntelliDriveSM HOT lane project that could be demonstrated during Phase 2. MTC staff facilitated a workshop with over 100 attendees from private industry and public agencies, which provided an opportunity to obtain feedback on the proposed field test. A written summary of the workshop was issued on December 14, 2009.

The Phase 2 contractor will design/build/operate a testbed for the IntelliDriveSM HOT lane project and operate the field test of the recommended toll collection and traveler information use cases. Results of the testing will serve to further inform national research about how IntelliDriveSM deployment would support HOT lane operations. We expect that the field test design will begin in November 2010, testing will operate in the summer of 2011, with the final evaluation report completed by November 2011. This schedule is subject to final negotiations with Mixon/Hill.

Request for Proposal Process

Staff issued a draft Request for Proposal (RFP) for Industry Review in April 2010 and a final RFP on July 1, 2010. The final RFP incorporated feedback from interested consultants. Responses were received on August 24, 2010 from five consultant teams: Accenture, ICx, Kapsch, Mixon/Hill and SAIC. Accenture's proposal was deemed non-responsive.

The evaluation panel included staff from MTC, Caltrans and BATA and two technical advisors from Alameda County Transportation Commission and US DOT. The evaluation criteria, in order of importance, were: 1) team qualifications, 2) proposed approach, 3) cost effectiveness, including hours and appropriateness of personnel assigned to each task, and 4) communications. Based on an initial evaluation of the four responsive written proposals, the panel held in-person interviews with Kapsch and Mixon/Hill. After a thorough review of the proposals and the interviews, the evaluation panel unanimously recommended the selection of the Mixon/Hill team.

Mixon/Hill is active in IntelliDriveSM projects nationally and teamed with Cogenia Partners and Texas Transportation Institute (TTI) on this project. The evaluation panel determined this team to be the most advantageous to MTC based on several factors: depth of knowledge of IntelliDrive and HOT lane technologies; competency of Project Manager; the proposal's identification of project's risks and possible mitigation plans; proposed Concept of Operations for the toll collection and traveler information use cases; sensitivity to stakeholders' needs; analysis of possible lane-level positioning systems and selection of GPS aided by inertial system correction; and understanding of the limitation of technology development/quantitative assessments on active freeway lanes.

Underutilized Disadvantaged Business Enterprise (UDBE) Requirement

On June 2, 2009, Caltrans imposed DBE requirements on subrecipients of DOT funding that are in effect for this contract. Those requirements require that for a proposal to be responsive and responsible, it must either meet a specified UDBE goal or demonstrate their good faith efforts to reach the goal. (UDBEs are DBEs owned by one or more of the following groups: Black American, Asian-Pacific American, Native American or Women.) This procurement included a UDBE goal of 4%. Mixon/Hill will meet this goal by subcontracting with an Oakland UDBE firm, Urban Design Consulting Engineers, to design and implement the test track configuration for the toll collection use case.

Recommendation

Staff recommends that the Committee authorize the Executive Director or his designee to negotiate and enter into a contract in an amount not to exceed \$1,002,500 with Mixon/Hill Inc. to design/build/operate a testbed in order to analyze and test the feasibility and potential value of using IntelliDriveSM technologies to support HOT and express lane operations.

Steve Heminger

SH:JB

REQUEST FOR COMMITTEE APPROVAL

Summary of Proposed Consultant Contract

Work Item No.:	2654
Consultant:	Mixon/Hill Inc. Overland Park, KS
Work Project Title:	UPP IntelliDrive SM Phase 2
Purpose of Project:	Analyze and test the feasibility and potential value of using IntelliDrive technologies to support High-Occupancy/Toll (HOT) and express lane operations. The results of the testing will serve to further inform national research about how IntelliDrive SM would support HOT lane operations.
Brief Scope of Work:	Design/build/operate a testbed for the IntelliDrive HOT lane project and execute the field testing of toll collection and traveler information use cases.
Project Cost Not to Exceed:	\$1,002,500
Funding Sources:	UPP, RM1
Fiscal Impact:	UPP funding has been awarded by USDOT. Local match of 20% is provided by RM1 funds per BATA Resolution 74. Both are included in the agency budget.
Motion by Committee:	That the Executive Director or his designee is authorized to negotiate and enter into a contract with Mixon/Hill Inc. to carry out Phase 2 of the UPP IntelliDrive SM project, and the Chief Financial Officer is authorized to set aside funds for such contract in the amounts specified, subject to annual agency approval processes.
Operations Committee:	<hr/> Amy Rein Worth, Chair
Approval Date:	October 8, 2010